

Listing Of Claims

Claims 1-46 (Canceled)

47. (new) A semiconductor component comprising:
a semiconductor die comprising a plurality of die contacts in a pattern;
a plurality of conductors on the die in electrical communication with the die contacts configured to redistribute the pattern of the die contacts;
a plurality of first contacts on the die in electrical communication with the conductors; and
a plurality of second contacts on the die in electrical communication with the conductors configured for electrical contact by a test probe without electrical engagement of the first contacts.

48. (new) The component of claim 47 wherein the first contacts comprise bumps in an area array.

49. (new) The component of claim 47 further comprising an under bump metallization layer on each first contact.

50. (new) The component of claim 47 wherein the second contacts comprise pads.

51. (new) The semiconductor component of claim 47 wherein the component is contained on a wafer.

52. (new) The component of claim 47 further comprising an electrically insulating layer between the die and the conductors.

53. (new) The component of claim 47 wherein the conductors are configured to fan out or to fan in the pattern of the die contacts.

54. (new) A semiconductor component comprising:
a semiconductor die having a face and a plurality of die contacts on the face in a pattern;
a plurality of conductors on the face in electrical communication with the die contacts configured to redistribute the pattern of the die contacts;
an electrically insulating layer on the conductors having a plurality of openings;
a plurality of first contacts on the face in electrical communication with the conductors; and
a plurality of second contacts on the face in electrical communication with the conductors comprising pads aligned with the openings configured for electrical contact with a test probe.

55. (new) The component of claim 54 wherein the pads comprise portions of the conductors.

56. (new) The component of claim 54 wherein the component comprises a semiconductor wafer.

57. (new) The semiconductor component of claim 54 wherein the first contacts comprise balls in a ball grid

array and each ball of the ball grid array is in electrical communication with a second contact.

58. (new) A semiconductor component comprising:
a semiconductor wafer;
a plurality of components on the wafer comprising a plurality of die contacts;
a redistribution circuit on the wafer comprising a plurality of conductors in electrical communication with the die contacts;
a plurality of test contacts on the wafer in electrical communication with the conductors; and
a plurality of terminal contacts on the wafer in electrical communication with the conductors;
the test contacts configured for electrical contact by a test probe without interference from the terminal contacts, each test contact in electrical communication with a terminal contact.

59. (new) The component of claim 58 wherein the terminal contacts comprise under bump metallization layers and solder bumps.

60. (new) The component of claim 58 further comprising an electrically insulating layer on the redistribution circuit having a plurality of openings aligned with the test contacts.

61. (new) The component of claim 58 wherein the test contacts comprise portions of the conductors.

62. (new) The component of claim 58 wherein the test probe comprises a needle probe, a buckle beam probe, a spring segment probe or a silicon probe.

63. (new) A semiconductor component comprising:
a semiconductor die comprising a plurality of die contacts in a pattern;
a plurality of redistribution conductors on the die in electrical communication with the die contacts;
a plurality of bumped contacts on the die in electrical communication with the conductors; and
a plurality of test contacts on the die in electrical communication with the conductors, each test contact configured for electrical contact by a test probe without interference from the bumped contacts.

64. (new) The component of claim 63 wherein the die is contained on a semiconductor wafer containing a plurality of dice substantially similar to the die.

65. (new) The component of claim 63 wherein the bumped contacts comprise solder balls and under bump metallization layers in a grid array.

66. (new) The component of claim 63 wherein the test contacts comprise portions of the redistribution conductors.

67. (new) The component of claim 63 wherein the test contacts comprise separate pads.